

In the Claims:

The claims are as follows:

1-12 (Canceled)

13. (Previously presented) An electrical structure, comprising:

a substrate for the attachment of a ball grid array electronic package thereto by means of solder balls and solder paste wherein connection is made between a contact on the ball grid array electronic package and a solder ball by means of a first joining medium and between said solder ball; and

a substrate contact arranged on the substrate wherein the contact arranged on the substrate is substantially quadrilateral in shape and has at least one transverse dimension greater than a diameter of said solder ball,

wherein said substrate contact is configured on the substrate in relation to the solder ball such that an x-ray through said electronic package illuminates said solder ball and said contact, so that a bad joint shows in an x-ray image resulting from said x-rays as a round image of said solder ball and a good joint, in which said solder ball flows into said substantially quadrilateral shape, shows in said x-ray image as a quadrilateral image.

14. (Previously presented) The electrical structure of claim 13, wherein the contact arranged on the substrate is substantially square in shape; so that a good joint shows in said x-rays as a square shape.

09/804,534

2

15. (Previously presented) The electrical structure of claim 13 wherein the joining medium is solder paste.

16. (Previously presented) The electrical structure of claim 13 wherein said solder ball has an initial, substantially round shape prior to making said connections.

17. (Previously presented) The electrical structure of claim 13, wherein said contact has a thickness less than a thickness of said solder ball and a surface adapted for flowing said solder throughout said transverse dimension, so that in a good joint material from said solder ball flows to cover the transverse extent of said contact and produces an image different from a corresponding image of a bad joint.

18. (Previously presented) The electrical structure of claim 17, wherein said surface adapted for flowing said solder throughout said transverse dimension is substantially planar, so that solder flow is unimpeded.

19. (Previously presented) The electrical structure of claim 14, wherein said at least one transverse dimension is a diagonal of said quadrilateral that is greater in length than a corresponding diameter of said solder ball.